12. A process for preparing a crystalline cephalosporin hydrohalide salt of the formula

$$\begin{array}{c} 0 \\ C - OH \\ C + C - NH \\ S - O - C - NH \\ S$$

where X is chloride or bromide, which comprises the steps of

(a) treating the N-tritylamino cephalosporin compound of the formula

with a solution of a polar organic solvent and water and hydrogen halide, where halide is chloride or bromide, in an amount which is at least stoichiometrically equivalent to the amount of the N-trityl compound (3) in the mixture,

- (b) heating the mixture from step (a) to a temperature of at least 45° C. and for a time/sufficient to effect detritylation,
- (c) decreasing the concentration of the polar organic solvent in the aqueous phase of mixture from step (b) to effect formation of crystalline cephalosporin hydrohalide salt (1),
- (d) separating the crystalline cephalosporin hydrohalide salt from the slurry/mixture from step (c),

